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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,049	02/04/2004	C. Wayne Roberts	12247N/030197	4838

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EXAMINER

RINEHART, KENNETH

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/774,049

Applicant(s)

ROBERTS ET AL.

Examiner

Kenneth B Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-18 and 20-25 is/are rejected.
- 7) ☒ Claim(s) 12, 13 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/7/2004
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 9-11, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Gipson (5926968). Gipson shows A dry kiln system for drying a stack of lumber, comprising: at least one kiln chamber defining a chamber interior space capable of receiving a stack of lumber for drying (14, fig. 1); a chamber heating source capable of providing heated air (16, fig. 1); an air moving device capable of circulating heated air supplied to the chamber interior space (19, fig. 1); a condensation collection device for collecting liquid in the chamber interior (col. 2, lines 46-47), an evaporation system for evaporating collected liquid from the chamber interior space (col. 1, lines 56-59, 48, fig. 1), a drain system to receive liquid from the condensation device (col. 2, line 47), wherein the condensation collection device directs liquid to a liquid drainage system (col. 2, lines 49-50), the heating source is further capable of providing heat to the evaporation system to effect evaporation of liquid collected by the condensation collection device (16, 18, fig. 1), the evaporation system comprises a liquid holding tank and an evaporation device heating source, wherein the heating source effects evaporation of the liquid in the holding tank(18, 48, fig. 1), the evaporation device comprises a liquid holding tank, and heat from the chamber heating source is directed to the liquid holding talk to effect evaporation of the liquid in the holding tank (18, 48, fig. 1), providing a kiln system that comprises a chamber

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interior space for receiving a quantity of stacked lumber (14, fig. 1); a chamber heating source for heating the air within the structure for drying the lumber (16, fig. 1); and a condensation collection device for collecting liquid in the chamber interior space (col. 2, lines 44-46); placing a quantity of stacked wet lumber within the chamber interior surface (col. 1, line 9); circulating heated air within the chamber interior surface and about the stacked lumber to dry the lumber and cause liquid in the wet lumber to escape as vapor (19, fig. 1, fig. 2); collecting liquid from condensed vapor in the chamber interior surface (col. 2, lines 46-47); and evaporating said liquid to prevent effluent liquid in the process for drying lumber (48, fig. 1); providing a pump chamber and an evaporation unit (20, 41, fig. 1, 48, fig. 1); pumping the collected liquid to the evaporating unit to effect evaporation (fig. 1), the evaporation unit is a liquid storage tank downstream from the pump chamber (fig. 1).

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis (4,250,629). Lewis shows A dry kiln system for drying a stack of lumber, comprising: at least one kiln chamber defining a chamber interior space capable of receiving a stack of lumber for drying (fig. 1); a chamber heating source capable of providing heated air (36, fig. 1); an air moving device capable of circulating heated air supplied to the chamber interior space (34, fig. 1); a condensation collection device for collecting liquid in the chamber interior (32, fig. 1), an evaporation system for evaporating collected liquid from the chamber interior space (24, fig. 1), the condensation collection device is an evaporator coil in the chamber interior space (24, fig. 1), a drain system to receive liquid from the condensation device (52, fig. 1), wherein the condensation collection device directs liquid to a liquid drainage system (32, 52, fig. 1).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gipson in view of Brunner. Gipson discloses A dry kiln system for drying a stack of lumber, comprising: at least one kiln chamber defining a chamber interior space capable of receiving a stack of lumber for drying (14, fig. 1); a chamber heating source capable of providing heated air (16, fig. 1); an air moving device capable of circulating heated air supplied to the chamber interior space (19, fig. 1); a condensation collection device for collecting liquid in the chamber interior (col. 2, lines 46-47), an evaporation system for evaporating collected liquid from the chamber interior space (col. 1, lines 56-59, 48, fig. 1), the evaporation system (48, fig. 1). Gipson discloses applicant's invention substantially as claimed with the exception of the condensation device comprises a liquid contact surface, the dry kiln system further comprises a liquid drainage system, and said the liquid contact surface directs liquid toward ..., the liquid contact surface slopes to a liquid drain system, utilizing gravity to direct liquid toward a liquid drainage system, wherein the liquid contact surface is a sloping floor of the chamber interior space. Brunner teaches the condensation device comprises a liquid contact surface (15, fig. 1), the dry kiln system further comprises a liquid drainage system (35, fig. 1), and said the liquid contact surface directs liquid toward ... (35, fig. 1), the liquid contact surface slopes to a liquid drain system (fig. 1), utilizing gravity to direct liquid toward a liquid drainage system (fig. 1), wherein the liquid contact surface is a sloping floor of the chamber interior space (fig. 1) for the purpose of reducing

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operating and maintenance expenses. It would have been obvious to one of ordinary skill in the art to modify Gipson by including the condensation device comprises a liquid contact surface, the dry kiln system further comprises a liquid drainage system, and said the liquid contact surface directs liquid toward ..., the liquid contact surface slopes to a liquid drain system, utilizing gravity to direct liquid toward a liquid drainage system, wherein the liquid contact surface is a sloping floor of the chamber interior space as taught by Brunner for the purpose of reducing operating and maintenance expenses to improve the cost effectiveness of the apparatus.

Claims 14 –17, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gipson. Gipson discloses A dry kiln system for drying a stack of lumber, comprising: at least one kiln chamber defining a chamber interior space capable of receiving a stack of lumber for drying (14, fig. 1); a chamber heating source capable of providing heated air (16, fig. 1); an air moving device capable of circulating heated air supplied to the chamber interior space (19, fig. 1); a condensation collection device for collecting liquid in the chamber interior (col. 2, lines 46-47), an evaporation system for evaporating collected liquid from the chamber interior space (col. 1, lines 56-59, 48, fig. 1), a ... of kiln chambers defining a chamber interior space capable of receiving a stack of lumber for drying (fig. 1), wherein the system further comprises a liquid drain system capable of receiving liquid from each kiln chamber and capable of delivering said liquid to the evaporation system (col. 2, lines 47-50), wherein collected liquid from said ... of kiln chambers is directed to a common pump chamber for delivery to an evaporation system (20, 41, fig. 1), the evaporation system comprises a liquid holding tank with a heat source to effect evaporation (18, 48, fig. 1), placing a quantity of stacked wet lumber within the chamber interior surface (col. 1, line 9); circulating heated air within the chamber interior surface and about the

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stacked lumber to dry the lumber and cause liquid in the wet lumber to escape as vapor (19, fig. 1, fig. 2); collecting liquid from condensed vapor in the chamber interior surface (col. 2, lines 46-47); and evaporating said liquid to prevent effluent liquid in the process for drying lumber (48, fig. 1), the pump chamber directs liquid collected from ... chamber interior space (20, 41, fig. 1), wherein the pump chamber directs collected liquid to ... evaporation unit (18, fig. 1). Gipson discloses applicant's invention substantially as claimed with the exception of plurality, more than one. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have plurality because applicant has not disclosed that the number of kilns, or chambers or evaporation units provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the number of kilns, or chambers or evaporation units of Gipson or the claimed number because both quantities perform the same function of drying lumber equally well.

Claims 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gipson in view of Koetter. Gibson discloses A dry kiln system for drying a stack of lumber, comprising: at least one kiln chamber defining a chamber interior space capable of receiving a stack of lumber for drying (14, fig. 1); a chamber heating source capable of providing heated air (16, fig. 1); an air moving device capable of circulating heated air supplied to the chamber interior space (19, fig. 1); a condensation collection device for collecting liquid in the chamber interior (col. 2, lines 46-47), an evaporation system for evaporating collected liquid from the chamber interior space (col. 1, lines 56-59, 48, fig. 1), placing a quantity of stacked wet lumber within the chamber interior surface (col. 1, line 9); circulating heated air within the chamber interior surface

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and about the stacked lumber to dry the lumber and cause liquid in the wet lumber to escape as vapor (19, fig. 1, fig. 2); collecting liquid from condensed vapor in the chamber interior surface (col. 2, lines 46-47); and evaporating said liquid to prevent effluent liquid in the process for drying lumber (48, fig. 1), a ... of kiln chambers defining a chamber interior space capable of receiving a stack of lumber for drying (fig. 1), wherein collected liquid from said ... of kiln chambers is directed to a common pump chamber for delivery to an evaporation system (20, 41, fig. 1), the evaporation system comprises a liquid holding tank with a heat source to effect evaporation (18, 48, fig. 1). Gipson discloses applicant's invention substantially as claimed with the exception of the evaporation unit is a surface of a chamber interior space, plurality, the evaporation system comprises a surface of a kiln chamber interior space of at least one kiln in the kiln system. Koetter teaches the evaporation unit is a surface of a chamber interior space, the evaporation system comprises a surface of a kiln chamber interior space of at least one kiln in the kiln system (fig. 2) for the purpose of preventing deterioration of the kiln floor. It would have been obvious to one of ordinary skill in the art to modify Gipson by including the evaporation unit is a surface of a chamber interior space, the evaporation system comprises a surface of a kiln chamber interior space of at least one kiln in the kiln system as taught by Koetter for the purpose of preventing deterioration of the kiln floor. Gipson in view of Koetter discloses applicant's invention substantially as claimed with the exception of plurality. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have plurality because applicant has not disclosed that the number of kilns provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either

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the number of kilns of Gipson or the claimed number because both quantities perform the same function of drying lumber equally well.

Allowable Subject Matter

Claims 12, 13 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to driers in general: Brunner (5,979,074), Drake (4467532), Lewis (4250629).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 571-272-4881. The examiner can normally be reached on 7:20 -4:20.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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KBR


KENNETH RINEHART
PRIMARY EXAMINER